

ABSTRACT OF THE DISCLOSURE

An apparatus and method that schedules and allocates data transmissions over communication channels within a broad-band communications system is provided. Data transmissions are first scheduled with priority to data service users granted access to radio resources first, until more data transmissions require service than there are radio resources available. Then, data transmissions are scheduled according to a resource scheduling priority 135 as determined by a resource scheduling function within a resource scheduling and allocation algorithm 300, 500. The resource scheduling function considers various communications parameters (e.g., frame count, transmission time, number of data frames queued, signal/noise ratio, frame error rate (FER), bit error rate (BER), transmission delay, jitter, etc.) and can be implemented to treat data service requests proportionately (algorithm 300) or disproportionately (algorithm 500). Once assigned, allocation of the radio resource to a given data transmission is based on a resource allocation parameter 140 (e.g., frame count, transmission time).

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